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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,724	08/19/2003	Li-Ming Wang	MR2663-31/CIP/2	3797

4586 7590 09/09/2004

ROSENBERG, KLEIN & LEE
3458 ELLICOTT CENTER DRIVE-SUITE 101
ELLICOTT CITY, MD 21043

EXAMINER

MEREK, JOSEPH C

ART UNIT	PAPER NUMBER
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3727

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/642,724

Applicant(s)

WANG, LI-MING

Examiner

Joseph C. Merek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/19/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirk, Jr. (US 3,534,475) in view of Gnida et al (4,215,187) and Further in view of Fanshier (US 2,522,258). Regarding claim 1, Kirk, Jr. teaches the claimed invention but does not specify the material for the connector 28. Gnida et al, as seen in Fig. 4 and Col. 3, lines 29-31, teaches a similar connector with a rivet section where the connector is made of stainless steel. It would have been obvious to employ stainless steel of Gnida et al in the connector of Kirk, Jr. to provide a connector that will not rust. See Kirk, Jr. where the press section is 29. The part of 29 connected to the shoulder adjacent 32 is the support portion of the press section and the free end of 29 is the rivet press portion. Regarding claim 3, see Kirk, Jr., Fig. 2 and Col. 2, lines 36-53, where the leak proof ring is 30. The ring 30 is mounted on the support portion of the press section. The leak proof ring is pressed by the rivet press portion of the press section. Regarding claim 4, the securing ring is seen in Fig. 1 of Kirk et al as 48, which is the indented area which secures the two sections together. This is a ring since it is an

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annular feature. Regarding claim 5, see Fig. 2, of Kirk et al where diaphragm is reinforced.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kirk, Jr. in view of Gnida et al and Fanshier as applied to claim 1 above and further in view of Guritz (US 3,289,287). Regarding claim 3, the modified tank of Kirk, Jr. teaches the claimed invention but does not teach the rivet portion having a thickness less than the thickness of the support portion. Guritz teaches a similar connector where the rivet portion is thinner than the support portion. It would have been obvious to employ the tapering rivet portion of Guritz in the connector of modified tank of Kirk, Jr. to make it easier to roll the rivet portion.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirk, Jr. in view of Gnida et al and Fanshier as applied to claim 5 above, and further in view of MacDuff (US 2,893,433). Regarding claim 6, the modified container of Kirk, Jr. does not teach the bumps on the thickened area. MacDuff as seen in Fig. 1, teaches a similar container with bumps on the end of the diaphragm. It would have been obvious to employ the bumps of MacDuff in the modified container of Kirk, Jr. to allow for fluid flow as taught by MacDuff in Col. 2, lines 51-60. Regarding claim 7, the connector of Kirk is soldered on the upper chamber. The process step does not require any structure that is not in the combination of references.

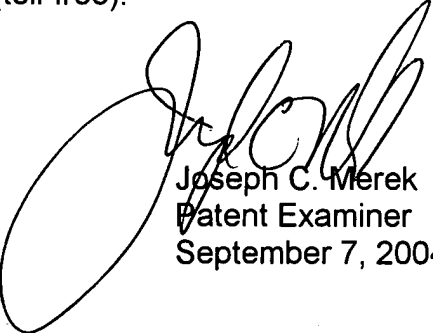
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C. Merek whose telephone number is (703) 305-0644. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee Young can be reached on (703) 308-2572. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph C. Merek
Patent Examiner
September 7, 2004